

**AMENDMENTS TO THE SPECIFICATION**

**Please replace the heading before the first full paragraph on page 1 of the specification with the following amended heading:**

~~TECHNICAL FIELD~~FIELD OF THE INVENTION

**Please replace the heading after the first full paragraph on page 1 of the specification with the following amended heading:**

~~BACKGROUND TECHNIQUE~~DESCRIPTION OF RELATED ART

**Please replace the heading before the last paragraph on page 7 of the specification with the following amended heading:**

~~DISCLOSURE~~BRIEF SUMMARY OF THE INVENTION

**Please replace the heading after the second full paragraph on page 9 of the specification with the following amended heading:**

~~BEST MODE FOR CARRYING OUT~~DETAILED DESCRIPTION OF EXEMPLARY EMBODIMENTS OF THE PRESENT INVENTION

**Please replace the first paragraph on page 10 of the specification with the following amended paragraph:**

FIG. 6 shows a principle structure of the present invention. As shown in FIG. 6, a simulation controller 300 of an integrated design system controls the entire procedure by calling sub-routines. The simulation controller 300 includes four contents, i.e., (1) maneuver, (2) simulation, (3) data to be produced, and (4) storing a result in a readable common file. An interface 200 is connected to the simulation controller 300. A control system analysis tool 100, a motor electromagnetic field analysis tool 110 and a mechanism analysis tool 120 are connected to the interface 200. The interface 200 converts a file of each analysis tools into a readable

common file, and produces an index array which explains a variable sequence. The interface 200 mainly has functions of (1) standardization of data definitions, (2) standardization of formats common, and (3) high speed communication of data. The control system analysis tool 100, the motor electromagnetic field analysis tool 110 and the mechanism analysis tool 120 are above-described conventional software. The control system analysis tool 100 is Matlab/Simulink or similar software, the motor electromagnetic field analysis tool 110 is JAMG-JMAG or similar software, and the mechanism analysis tool 120 is ADAMS or similar software.

**Please replace the second paragraph on page 10 of the specification with the following amended paragraph:**

For example, data is exchanged between Matlab/Simulink of the control system analysis tool 100 and JAMG-JMAG of the motor electromagnetic field analysis tool 110; Matlab/Simulink of the control system analysis tool 100 and ADAMS of the mechanism analysis tool 120 of vehicle; and JMAG of the motor electromagnetic field analysis tool 110 and ADAMS of the mechanism analysis tool 120 of vehicle through Matlab/Simulink of the control system analysis tool 100, through the S-Function supplied by Matlab/Simulink of the control system analysis tool 100. A memory-resident region required for exchanging data of the interface 200 is secured by using WORK VECTOR supplied by Matlab/Simulink of the control system analysis tool 100, and the constituted interface software (S-Function) is converted to DLL (Dynamic Link Library). With this, speed of data exchange between the analysis tools can further be increased. Management of calculation state is executed by Matlab/Simulink. For example, proceeding of calculation steps are executed by Matlab/Simulink, and through the interface 200, calculation in each step is executed by JMAG and ADAMS. A result of calculation is mutually shared through the interface 200.

**Please replace the first full paragraph on page 12 of the specification with the**

**following amended paragraph:**

In the above embodiment, Matlab/Simulink is used as the control system analysis tool 100, JAMG-JMAG is used as the motor electromagnetic field analysis tool 110 and ADAMS is used as the mechanism analysis tool 120 of the vehicle. However, in the present invention, other software can also be used as the control system analysis tool 100, the motor electromagnetic field analysis tool 110, the mechanism analysis tool 120 of the vehicle.